

FINDING OF NO SIGNIFICANT IMPACT

Abert Fire Emergency Rehabilitation Plan

EA# OR-010-2001-01

The Bureau of Land Management, Lakeview District, Lakeview Field Office, has analyzed a proposal and its alternatives for a fire rehabilitation plan from a wildfire (Abert Fire) that occurred August 3, 2000. The proposal involves noxious weed control and construction of 3.5 miles of fencing. The objectives of this proposal are to control the spread of noxious weeds and to protect the burn area from livestock grazing for at least two years.

The proposed action is in conformance with current BLM Emergency Fire Rehabilitation Policy and the Integrated Noxious Weed Control Programmatic EA # OR-013-93-03.

There are no floodplains, wild and scenic rivers, known hazardous waste areas, areas of religious concern, prime or unique farmlands in the immediate project area. A portion of the burn area is in a Wilderness Study Area, which would dictate how noxious weed treatments would be applied in that area. No adverse or beneficial significant impact is anticipated to fisheries, lands, minerals, and cultural or paleontological resources. Some special status plant species and unique plant communities are known to be in close proximity to the burn area which would also dictate how noxious weed treatments would be applied.

On the basis of the analysis contained in the attached EA and all other information, it is my determination that none of the alternatives analyzed constitute a major federal action that would adversely impact the quality of the human environment. Therefore, an Environmental Impact Statement (EIS) is unnecessary and will not be prepared.

Scott R. Florence

Scott Florence, Manager
Lakeview Field Office

2/22/01

Date

Lakeview District Bureau of Land Management
Abert Fire Rehabilitation Plan (M110)
Environmental Assessment
EA No. OR-010-2001-01

1.0 BACKGROUND

A human-caused wildfire, the Abert Fire, occurred in the Lake Abert area on Highway 395, Mile Post 79-80, T 34S., R21E, Sec. 13 NWSE on August 3, 2000 (see map 1). The fire burned approximately 10,100 acres of public land. The western edge of the fire burned along Abert Rim in the Abert Rim WSA which consisted mainly of annual grasses, weeds, some brush and native bunch grasses. The remaining portion of the fire burned in sagebrush/native bunch grass areas in the Coyote-Colvin Allotment (#517). The majority of the areas burned should recover to satisfactory vegetation. Rehabilitation is needed in the form of weed control and fence construction.

2.0 PURPOSE AND NEED

BLM manual H-1742 provides for emergency fire rehabilitation where fire has an adverse impact on vegetation, soils, watershed, and to minimize other adverse changes to the extent practicable, including the following:

- loss of vegetative cover for watershed protection;
- loss of soil and on-site productivity;
- loss of water control and deterioration of water quality;
- invasion of burned area by flammable annual species, which increase the potential for repeated wildfire;
- invasion of noxious weeds and loss of vegetative diversity.

The area burned by the Abert Fire is in need of rehabilitation in the form of reducing the potential for noxious weed invasion, and constructing a fence to restrict livestock use from the burned area. These objectives can be met by surveying and treating noxious weeds for three years and constructing a fence in Spring 2001 before any livestock are allowed into the adjacent area. The benefits and risks of implementing these actions to control noxious weeds and livestock use as compared to a no action alternative will be analyzed in this EA.

3.0 CONSISTENCY WITH LAND USE PLANS

While existing land use and fire management plans encourage the use of fire as a management tool, they are silent on the issue of wildfire rehabilitation. The Integrated Noxious Weed Control Programmatic EA #OR-013-93-03 addresses the survey and treatment of weed sites. The proposed action is in conformance with this noxious weed EA and current BLM Emergency Fire Rehabilitation Policy

4.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Table 1: Summarized treatments by alternative

	Proposed Action Alternative 1 Weed Treatment & Fencing	Alternative 2 Fencing Only	Alternative 3 No Action
Noxious Weed Survey & Treatment (acres)	10,100	0	0
Fencing (miles)	3.5	3.5	0
Monitoring	Yes	Yes	Yes

4.1 Proposed Action - Alternative 1

The proposed action is to survey and treat the Abert Fire for noxious weeds over a three year period and construct a fence for controlling livestock use. Noxious weed treatments could include aerial or ground spraying with an appropriate herbicide and/or mechanical treatments. A 3-wire fence of 3.5 miles would be constructed on the north and west edges of the burned area to restrict livestock from grazing on naturally recovering vegetation. The fence would be built to BLM standard specifications, including smooth wire on the bottom to accommodate wildlife. Reseeding is not part of the proposed action because it has been determined that the existing native seed source is sufficient to allow for the natural recovery of vegetation in the burn area.

Livestock grazing would be excluded from the entire Twin Lakes pasture of the Coyote-Colvin Allotment (#517) for at least two growing seasons (approximately 10,000 acres). Any use after the second growing season would be determined prior to turnout and be based on the natural recovery of existing vegetation. The livestock permittee would be required to maintain the fence when livestock are in areas adjacent to that fence.

Monitoring of the burn area would consist of livestock use supervision, vegetation and noxious weed monitoring.(See Section 8.0)

4.2 Fencing Only - Alternative 2

Rehabilitation actions under this alternative would consist only of constructing a fence. Livestock would be excluded from the burned area utilizing a fence as described in the proposed action for two growing seasons or until existing vegetation has recovered naturally to a satisfactory level.

Monitoring of the burn area would consist of livestock use supervision, vegetation and noxious weed monitoring. (See Section 8.0). Treatment of noxious weeds is not a component of Alternative 2.

4.3. No Action - Alternative 3

Remove livestock grazing from the burn area for at least two growing seasons. No emergency rehabilitation would be completed. Re-vegetation of the burned area would be allowed to occur naturally from seed and plant material which has remained in the soil. No monitoring of the burn area would be completed beyond that scheduled prior to the fire.

5.0 AFFECTED ENVIRONMENT

5.1 Vegetation

Vegetation in the burned area consists of Wyoming big sagebrush (*Artemisia tridentata*) with perennial grass species such as Thurber's needlegrass (*Stipia thurbiana*), Squirreltail (*Sitanion hystrix*), Bluebunch wheatgrass (*Agropyron spicatum*), and Low sagebrush (*Artemisia arbuscula*) with Sandberg's bluegrass (*Poa sandbergii*). Black sagebrush (*Artemisia nova*) is also known to exist in this area.

5.2 Soils

Soil types range from shallow to deep over bedrock but fine textured. Surface textures are typically loam or clay loam with subsoil textures of clay and/or silty clay.

5.3 Livestock Grazing

The area covered by the proposed action is within the Twin Lakes pasture of the Coyote-Colvin Allotment (#517). The Twin Lakes pasture is rated at approximately 1300 AUMS and is grazed every other year between 6/1 and 10/1.

5.4 Wildlife

The burn area is within a habitat that supports most terrestrial animals common to the sagebrush steppe such as: mule deer, pronghorn antelope, Rocky Mtn. elk, Bighorn sheep, and sagegrouse.

5.5 Noxious weeds

Mediterranean Sage is present on the western edge of the burn area in all stages of growth.

6.0 ENVIRONMENTAL IMPACTS:

The potential environmental impacts resulting from the alternatives relative to the following critical resource values were evaluated. The following is a summary of the results:

Critical Element/ Resource Value	Significantly Affected		Critical Element/ Resource Value	Significantly Affected	
	Yes	No		Yes	No
Air Quality		X	T & E Species		X
ACEC/RNAs/ <i>PACEC**</i>		X	Wilderness		X
Cultural Resources		X	Wild & Scenic Rivers		X
Farmlands, Prime/Unique		X	Hazardous Wastes		X
Floodplains		X	Water Quality		X
Native American Cultural/ Religious Concerns		X	Wetlands/Riparian Zones		X
Low Income/ Minority Populations		X	Noxious weed	X	

**PACEC = Proposed Area of Critical Environmental Concern

DESCRIPTION of OTHER IMPACTS

6.1 Proposed Action - Alternative 1

6.1.1 Vegetation

The control of noxious weeds in the burned area with recovering perennial species in the Twin Lakes pasture of the Coyote-Colvin Allotment (#517) would provide for greater natural vegetative diversity.

Exclusion of livestock from the burn area would allow recovery of residual desirable species without the pressure of livestock use.

6.1.2 Soils

Soil erosion would increase in the short term as a result of loss of vegetative cover from the fire. The annual species which previously vegetated the area and are most likely to return under all three alternatives, provide less protection of the soil surface than would perennial species. With implementation of Alternative 1, controlling invasive noxious weeds would allow better recovery of desirable perennial species. Therefore, soil erosion rates would decrease as the perennial species gain dominance in the years subsequent to the fire. Perennial vegetation would also reduce long-term soil erosion by reducing the frequency of wildfire.

6.1.3 Livestock Grazing

A fence would be built on the east side of the Twin Lakes pasture to exclude livestock from the burn area within that pasture for at least two growing seasons or until existing vegetation has recovered satisfactorily. The livestock permittee would be required to maintain the fence when livestock are in areas adjacent to that fence, increasing operational costs to the permittee. In the long term, positive benefits would accrue to the livestock operator due to the re-establishment of perennial vegetation.

6.1.4 Wildlife

The proposed action would result in the natural recovery of some winter browse and cover for mule deer and antelope. The quality and quantity of habitat should increase for wildlife species with the establishment of perennial grass and forbs and the control of noxious weed invasion.

Structural habitat for sagebrush dependent species would be somewhat restored in the long term with reestablishment of sagebrush vegetation sites.

6.1.5 Noxious weeds

Surveying and treating noxious weeds, particularly Mediterranean Sage, over a three year span would control the invasive noxious weeds and allow desirable perennial species better recovery. Re-establishment of a diverse perennial vegetation community including grasses, forbs and shrubs would help prevent or minimize the proliferation and invasion of noxious weed species within the burn area.

6.2 Fencing Only - Alternative 2

6.2.1 Vegetation

Rehabilitation actions under this alternative would consist only of constructing a fence. Livestock would be excluded from the burn area utilizing a fence as described in section 4.2. Vegetation would be allowed to recover naturally from seed sources that have remained in the soil without the pressure of livestock use.

6.2.3 Livestock Grazing

Livestock would not be allowed to graze the Twin Lakes pasture for at least two growing seasons as required by BLM policy. As a result, any summer grazing in that pasture and adjacent areas would have to be moved to another site because no fence would be built to protect the burn area from use. Livestock production may be negatively impacted in the long term if noxious weed species increase in the burn area, reducing forage production.

6.2.4 Wildlife

Wildlife habitat and forage quality would not improve with no treatment of noxious weeds. A loss of shrub habitat would negatively affect big game and shrub dependant species.

6.2.5 Noxious weeds

Noxious weeds would not be treated, therefore, could become more invasive of any perennial native plants trying to recover naturally. Any future weed control efforts could become very extensive and expensive.

6.3 No Action - Alternative 3

6.3.1 Vegetation

No emergency rehabilitation efforts would be completed under this alternative. Re-vegetation of the burn area would occur naturally from seed sources remaining in the soil.

6.3.2 Livestock Grazing

Livestock would not be allowed to graze in the burn area for at least two growing seasons. However, without a protection fence constructed drift of livestock into the burn area could occur from neighboring pastures.

6.3.3 Wildlife

Wildlife habitat and forage quality would not improve with no treatment of noxious weeds. A loss of shrub habitat would negatively affect big game and shrub dependent species

6.3.4 Noxious Weeds

Noxious weeds would not be treated, therefore, could become more invasive of any perennial native plants trying to recover naturally. Any future weed control efforts could become very extensive and expensive.

7.0 CONSULTATION AND COORDINATION

BLM Resource Specialists Lakeview Field Office
Oregon Department of Fish & Wildlife
Coyote-Colvin Allotment permittee

8.0 MONITORING (All Alternatives)

8.1 Vegetation (All Alternatives)

The burn area would be monitored for vegetative recovery of desirable perennial species, including ocular inspection, to determine degree and extent of establishment. Monitoring could include photo plots and techniques to determine species occurrence, composition and vigor.

8.2 Livestock (Alternative 1 & 2)

Periodic use supervision will be conducted on the project area to ensure livestock are excluded during establishment and recovery of desirable vegetation in the burn area. Following at least two growing seasons of livestock exclusion, a determination will be made based on monitoring information when livestock grazing can be returned to the Twin Lakes pasture.

8.2.1 Livestock (Alternative 3)

Following at least two growing seasons of livestock exclusion, the Twin Lakes pasture could be scheduled for grazing. When livestock grazing resumes the standard monitoring methods of actual use, utilization mapping, and trend studies will also resume.

8.3 Noxious weeds (Alternative 1 & 2)

In the proposed action monitoring of noxious weed growth in the burn area would occur throughout the three year treatment time frame. Photo plots may be established, along with ocular inspections completed.

8.3.1 Noxious weeds (Alternative 3)

No monitoring for noxious weed growth in the burn area would be completed beyond that scheduled prior to the Abert fire.

Appendix 1.

“Modified Cost - Risk Analysis”

Treatment	<u>Cost</u>
Noxious Weed Survey and Treatment.....	\$40,000
Protective Fence.....	\$10,500
Fence Maintenance.....	\$ <u>-0-</u>
Soil/Watershed Structures	\$ <u>-0-</u>
All Other Costs (administrative, clearances, etc.)...	\$ <u>10,000</u>
TOTAL	\$60,500

Probability of Rehabilitation Treatments Successfully Meeting EFR Objectives

Treatments	Units	NA	%
Noxious Weeds—Survey and Treatment	10,100 ac		80
Other			
Protective Fence to Exclude Grazing	3.5 miles		90
Fence Repair to Exclude Grazing		x	
Soil/Watershed Structures		x	
Retention dams/structures		x	
Ripping, contour furrows, etc.		x	
Matting, watersheds cover, etc.		x	
Other-Clean culverts		x	

Appendix 2.

Risk of Resource Value Loss or Damage

Identify the risk (high, medium, low, none or not applicable (NA)) of unacceptable impacts or loss of resources.

Alternative 3 - No Action - Treatments Not Implemented (check one)

Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil				X	
Weed Invasion					X
Unacceptable Loss of Vegetation Diversity				X	
Unacceptable Loss of Vegetation Structure					X
Unacceptable Disruption of Ecological Processes				X	
Off-site Sediment Damage to Private Property			X		
Off-site Threats to Human Life		X			
Other - Loss of Access Road		X			

Alternative 2 - Fencing Only- Successfully Implemented (check one)

Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil				X	
Weed Invasion					X
Unacceptable Loss of Vegetation Diversity				X	
Unacceptable Loss of Vegetation Structure				X	
Unacceptable Disruption of Ecological Processes				X	
Off-site Sediment Damage to Private Property			X		
Off-site Threats to Human Life		X			
Other - Loss of Access Road		X			

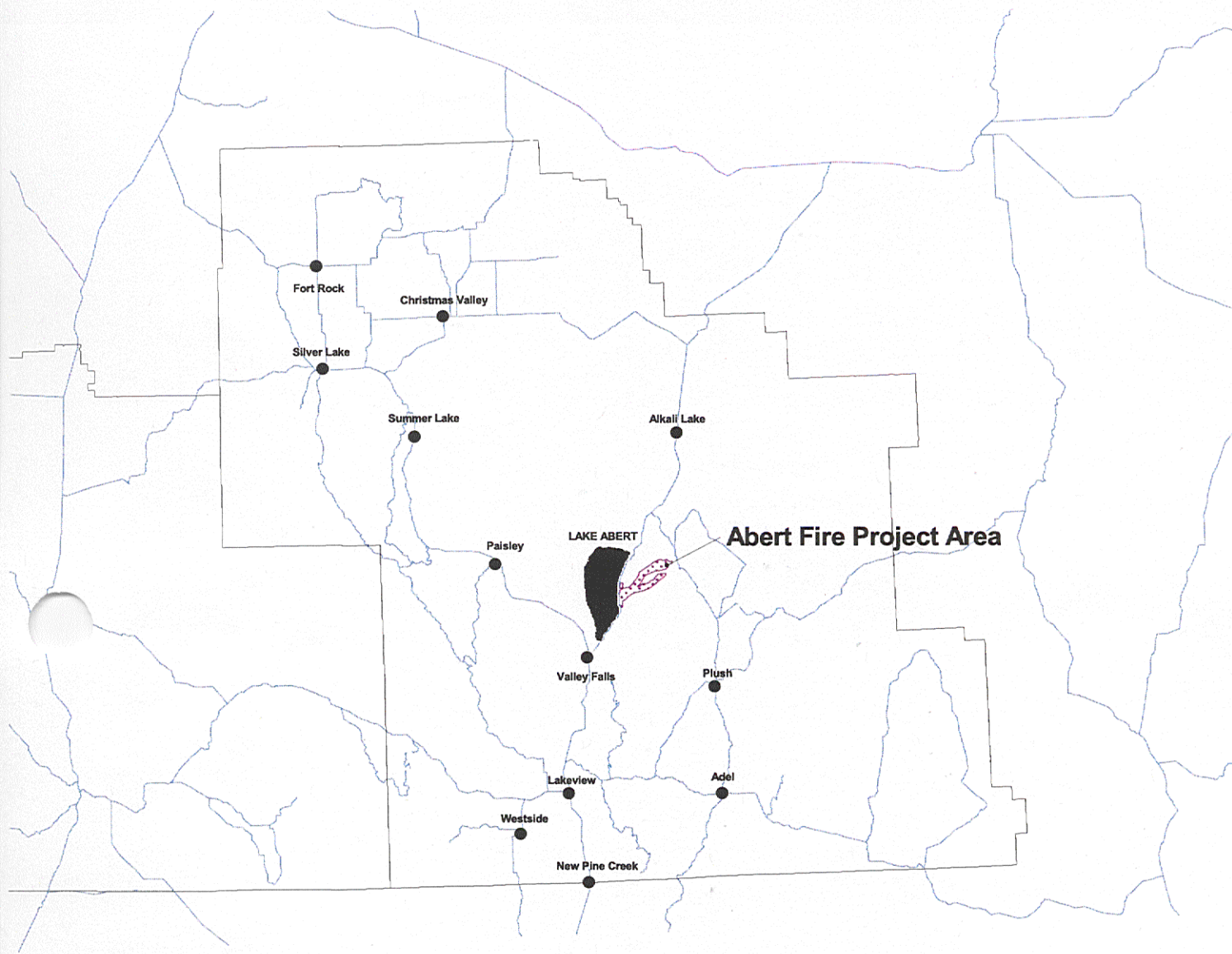
Alternative 1-Proposed Action - Treatments Successfully Implemented (check one)

Resource Value	NA	None	Low	Mid	High
Unacceptable Loss of Topsoil			X		
Weed Invasion			X		
Unacceptable Loss of Vegetation Diversity			X		
Unacceptable Loss of Vegetation Structure			X		
Unacceptable Disruption of Ecological Processes			X		
Off-site Sediment Damage to Private Property			X		
Off-site Threats to Human Life		X			
Other - Loss of Access Road		X			






Summary of Emergency Fire Rehab Cost Abert Fire

	<u>FY2001</u>	<u>FY2002</u>	<u>FY2003</u>
<u>Fencing (includes labor & materials)</u> 3.5 miles @ \$3000/mi	\$10,500.00	—	—
<u>Administrative Costs</u> 2 Work months @ 4750/WM Vehicle cost	\$ 9,500.00 500.00	—	—
<u>Noxious Weed Survey & Treatment</u> (Includes work months for monitoring)	<u>\$20,000.00</u>	<u>\$10,000</u>	<u>\$10,000</u>
TOTAL	\$40,500.00	\$10,000	\$10,000
GRAND TOTAL	<u>\$60,500.00</u>		

Abert Fire General Location Map



30 0 30 60 Miles

-  Lake Abert
-  Lakeview Resource Area Boundary
-  Cities
-  Major Roads
-  Abert Fire Project Area



Abert Fire



February 23, 2001

Scale:

0.7 0 0.7 1.4 Miles



Abert Fire (8/4/00 ; 10,121 acres)
Lake Abert WSA
LRA Allotment Boundaries

